

# Z88 EPROM

September 1990

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# Club Addresses

All articles for **Z88 EPROM** and any membership matters (**except** Software Library) should be sent to:

**Z88 USERS' CLUB  
68 WELLINGTON STREET  
LONG EATON  
NOTTINGHAM  
NG10 4NG**

All requests for software from the Club Software Library, (**but not** special offers), items for inclusion in the Library, and EPROMs for erasure should be sent to:

**THE SOFTWARE LIBRARY  
Z88 USERS' CLUB  
3/8 JENNER ROAD  
GUILDFORD  
SURREY  
GU1 3PL**

Please note that the **Library** address is the one to use when sending for a list of Library programs - this list is **not** available from the main Club address. Be sure to enclose £1 for the list.

The Club **CLI** Library is run by:

**MICHAEL HEY  
18 WOODSIDE ROAD  
SANDIACRE  
NOTTINGHAM  
NG10 5GP**

Any CLI's for the Library, requests for CLI's and the list of CLI programs should be sent to Michael Hey.

**ALWAYS** include your Membership Number with any correspondence. This is not just to be awkward - now the Club is large it can be very time-consuming searching the database for a member's number. Your number is printed on the address label of each issue of **Z88 EPROM**. Please be sure to enclose a stamped-addressed envelope with anything needing a reply.

# Editorial

Firstly, apologies for the lateness of this issue. The delay has been because I wanted to get my DTP problems sorted out, rather than resort to going to press in the old typed style as the last issue was. Full marks to GST Software Products for their help in getting the system running. Particular thanks to Paul Kaufman and Lorraine Shirley of Softline, the GST software support service.

With the DTP problems (hopefully!) behind me, time now for a moan. I have been appalled by the lack of response to the forthcoming Workshop Day on October 27th. At the time of writing, I have less than 20 members who have written for tickets, which means that at the present rate we will have more 'experts' than members at the Workshop!

I am particularly amazed by this lack of response - the survey done last year showed that 54% of members were interested in a future Workshop; and you must also remember that the Club has grown since then. The response so far represents about two thirds of one percent of members! It really makes me wonder if this is all worthwhile sometimes. The Workshop is the ideal place to bring all your Z88 problems and queries - there will be experts in virtually every area of the Z88 at your disposal, including how to write machine-code applications for the Z88.

I was hoping that if the October event was a success that the Workshops might become a two or three times a year event. I feel sure that the thirst for knowledge is there - all the written queries I get confirms that. If the numbers stay so low, the event looks to make a substantial financial loss. The £3 fee was set to cover hire of the facilities at Milton Keynes, and the necessary third-party insurance cover. These expenses are already committed, and the Workshop **will** go ahead.

All it needs is your support.

On a more cheerful note, you may remember last time I promised more news on the changes at Cambridge Computer. Unfortunately I have not yet been able to tie up with my contacts at Cambridge, so we are still in the dark. I have arranged a meeting for 17th September, so I hope to be able to give you the full lowdown next time....



# Newslines

**THE ONLY NEW PRODUCT** this time is the Z88 Data Logger from Ranger Computers. A software package designed to work with the ADAM analogue-to-digital converter module, the Data Logger will monitor up to 8 channels, logging at intervals between 1 second and 12 hours. The software gives a real-time graphical display of data during logging, and can write the data directly to Lotus or dBASE files for processing.

Price of the software is £75 plus p&p, and full details can be obtained from Ranger Computers Ltd, The Innovation Centre, Boughton Green Road, Moulton Park, Northampton. NN2 7AH. Tel: 0604 791064.

**NOT SPECIFICALLY Z88 NEWS**, but very relevant to the Z88 in the computer marketplace, is the recent launch by Tandy of their WP-2 Portable Word Processor. Looking very similar to the Z88 in format, the WP-2 has a proper "moving-key" keyboard, 32k RAM, a built-in 100,000 word spelling checker, and a 200,000 word thesaurus. It runs on 4 AA batteries or mains, and has RS-232 and parallel printer ports. Price is £249 + VAT, or £50 + VAT more than the basic Z88.

Early reviews seem full of praise for the machine, except that the software would seem to be slow and cumbersome. At this stage full details of the machine are not available, but as far as I can find out the machine is literally just a word processor with limited comms ability - there seems to be no way of expanding the software, and the WP-2 does not have any of the Z88's other facilities - BASIC, Diary, Calendar etc. The 32k RAM supplied can only be expanded to 64k, another severe limitation, except that I don't even know at this stage whether the machine stores files in RAM, or if you have to transfer them to another machine or print them out.

Even though the WP-2 would seem to offer little in the way of advantages over the Z88 (in fact, in many areas the Z88 surpasses the WP-2) there can be no doubt that the product is aimed straight at the Z88 target market. Given the fact that Tandy has an enormous dealer network, the product seems sure to succeed, in spite of its limitations.

**MORE COMMERCIAL PRESSURE** on Cambridge Computer comes from Atari. They are cutting the price of their Portfolio handheld computer by £50, to £199 + VAT, exactly the same price as the Z88. The Portfolio is DOS compatible, but seems let down by its tiny keyboard and expensive accessories. Atari also have an advantage over CCL with their huge dealer network and vast advertising spend.

With these extra pressures on the Z88, perhaps CCL need to be looking at a price cut on the basic Z88, or a value-added package with some bundled accessories, or even a re-vamped machine at the old price point. Or maybe all three!

## Helpline

If you have a technical query, write to one of our Helpliners listed below. Please note that you should include a stamped addressed envelope or sufficient return postage for your reply.

**CLI Files** - Contact Michael Hey by post only at: 18 Woodside Road, Sandiacre, Nottingham. NG10 5GP

**Z88 to Amstrad PCW Link** - Please write in the first instance to: Mr A West, 16 Southway, Burgess Hill, Sussex. RH15 9ST.

**zBASE, CLI and all Wordmongers products except TX and Comms software** - Contact Jason Crook (ex of wordmongers) at 4 Salisbury Close, Princes Risborough, Bucks. HP17 0JF. Telephone 08444 7075. I will also write to order in zBASE.

**zBASE** - Help on commands and programming. I can accept info/programs on paper, EPROM, zTape cassettes or IBM disk. Contact Robin Jarvis, 27 Gloucester Road, Waterlooville, Hants. PO7 7BJ.

**Z88 to Amstrad CPC Link** - Contact Duncan W. Kennedy at 32 Otterston Grove, Dalgety Bay, Fife. KY11 5PA.

**BASIC Programming** - Contact Richard Russell at 59 Campbell Road, Gravesend, Kent. DA11 0JZ.

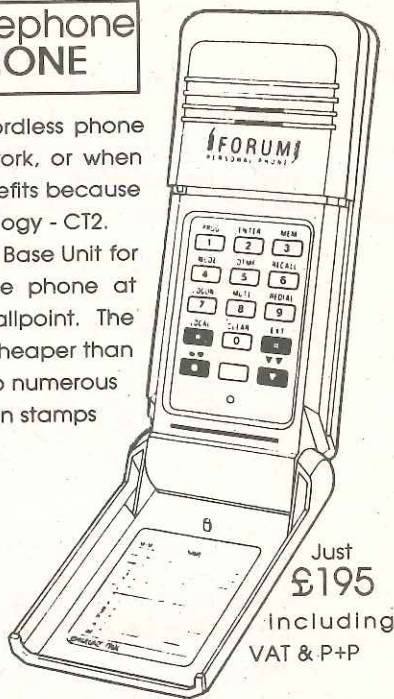
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# Wordmongers Ltd.

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Well Reader, greetings from Jason, the Wordmongerling who managed to spend the day with us at the All Formats Fair in September. He spent most of the day playing the new Golf game. Its written in BASIC and has some of the most imaginative graphics I've seen on the Z88. I even managed to complete the first hole (par 4) at Royal Troon in 6 shots. It's available at £25 on a 32K eprom.

As always, EPROM reviews are taken seriously. The EAZYMONEY comments have been noted and couple of niggles will be fixed. The standing orders question is different. With the volatile nature of the Z88 RAM I decided that to automate it was not advisable. Also, since it was originally conceived as an Expenses program rather than household accounts, standing orders did not figure. Having used it myself for a few months, I have to admit that a routine to attach some regular transactions would be useful. It is now on the list of DRATHERS, i.e. next time I -'d rather' do it that way.

One point conceded straight away is making the software available to zBASE users. This is now the case and the EAZYMONEY code is available on PC disk at £20 including VAT, postage and the manual. Contact TK Computerware before 1st December 1990.

Two other new products are currently under wraps but I can't reveal much until there are a bit farther down the road. One is aimed at the education market and the other is a straightforward commercial application.

As always, just as we have now taken the Golf game under our banner, we are always keen to look at other Z88 applications and games.

Just in case you get this edition before the Club Day on the 27th, all Wordmongers software and Superchips will available on the day.

THINKz updates will be available at no charge.

Tony.

Product Enquiries: Please Call 030381 3883



# RANGER

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**NEW!**

### Z88 DATA LOGGER

Designed for use with our ADAM A/D converter, this new application allows Z88 to become a versatile data logger.

Features include:

- \* On screen graphical display of data during logging
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- \* Logging intervals from 1 sec to 12 hrs

The Data Logger software is supplied on EPROM at £75.00, p & p £2.50 and will be available in September. Note that ADAM and Ranger Z88-2 are required.

### HARDWARE PRODUCTS

**SUMMER - Still available while stocks last**

**SPECIAL** For a limited period only, we are able to offer a "Summer Special" starter pack including: Ranger Z88: 128K RAM: 32K EPROM: EPROM Eraser: Carrying Case: Mains Adaptor: Set of batteries. All in stock at a very special price - £249.95 (ex VAT). Post and packing for the Summer Special is £4.50, or £11.00 next day delivery.

**RangerDisk** IBM PC compatible disk drive for the Z88. Reads/writes 720K 3.5" disks in DOS 3.3 format, suitable for use as stand alone file storage for Z88 or as data transfer device in busy situations. Copies single or multiple files, truly data transparent. Supplied complete with Diskfiler application in EPROM for Z88, connecting cable and manual at £450.00. P & P £4.50. Optional mains adaptor £17.50.

**Field Case** Genuine leather case for outdoor and utility applications. Price £70.00. P & P £4.50.

**Battery Pack** Rechargeable external battery pack, connects to Z88 mains adaptor socket, gives correct voltages and 8-12 Hr continuous operation, recharges overnight. Supplied complete with UK mains charger at £37.50. P & P £3.50.



**ADAM**

(Analogue Data Acquisition Module) is an analogue-to-digital converter module for the Z88. It provides 8 analogue input channels with a +/- 2v range and a resolution of 100  $\mu$ v. Power is supplied externally, or from a modified version of the Z88 supplied by Ranger. **ADAM** is available from stock at £250.00.

**Hardcase**

A ruggedised housing for the Z88. Developed by the New Zealand Ministry of Agriculture for recording fish catches at Sea, **Hardcase** enables a standard Z88 to be used in extreme environmental conditions. **Hardcase** is available at £495.00.

**Z88**

We keep the entire range of Z88 hardware and most supporting items in stock. Please enquire for details and prices.

**SOFTWARE PRODUCTS****RangerLink**  
(Formerly  
LEXLINK-C)

A new version of our **LEXLINK** Z88 to PC communication package, originally developed for the MOD, is now available. The new version, now called **RangerLink**, is designed for general purpose PC to Z88 communications and features much faster data rates than other PC-to-Z88 products, multiple file transfers and true data transparency.

**RangerLink** consists of an application EPROM for the Z88, a PC disk (please specify 3.5" or 5.25") and a connecting cable (please specify 9 or 25 pin). The application is driven from the Z88, which displays "windows" showing the current PC and Z88 directories, together with a command menu.

**RangerLink** is available now at £49.50. P & P £2.50.

**Vision-100**

VT-100, 102, 220 and 320 terminal emulator for Z88. Gives scrolling 24-line screen, file capture/transmit and full range of screen and keyboard emulation features. Faster than many standard terminals and suitable for use with VAX applications as well as many other systems. Supplied on EPROM pack at £175.00, complete with manual. P & P £3.50.

**CNC TX**

File capture/transmit facility for CNC machine tools. Price £55.00. P & P £3.50.

**Zback**

Add-in utility for PC Link II, allows automatic backup of entire Z88 files to PC. Supplied on 5.25" disk at £15.00. P & P £2.50.

**Please note that all prices exclude VAT.** We accept official orders from qualifying UK companies and government organisations. All others, cheque or P.O. with order please. Next day delivery available on all items, subject to stock, £11.00.

**Ranger Computers Ltd**  
**The Innovation Centre**  
**Boughton Green Road**  
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**Northampton NN2 7AH**

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**Fax: (0604) 791114**  
**Telex: 94017588 TBIC G**

**Interfacing Z88 to various hardware - Mac, BBC, PADs, also UNIX and C experience** - Contact J.P. Knight Email JANET on jpknight@uk.ac.lut.suna, or snail mail during term time to Room 66, Hazlerigg-Rutland Hall, Loughborough University of Technology, Ashby Road, Loughborough, Leics, LE11 3TZ.

**PipeDream/Diary/General** - Contact Keith Winsor at 13 Swansea Road, Reading, Berks. RG1 8EY. Or Telecom Gold 82:TLR1747.

**Z88-PCW Link** - Using C-Port program. Please contact David Prestage at 47 Knighton Road, Otford, Sevenoaks, Kent. TN14 5LD.

**Anything Educational** - Please contact Bob Shore, 8 Anchor Close, Hathern, Leics. LE12 5HP. Telephone 0509 842670.

**Z88 - Atari ST Links** - Please contact Ian Salmon, 18 Fillioll Close, E. Hanningfield, Essex. CM3 8UY.

**Machine-code Programming** - Please contact Richard Smith, 29 Sandhouse Crescent, Scunthorpe, South Humberside, DN16 1JF.

Can anyone offer Helpline for printer set ups?

## Members' Letters

David McLean (1148)  
Greenwich London

Dear Roy,

At work, there used to be three unwritten office rules:

1. The managing director has no time for office computers.
2. If you ask for a computer, you shall not have one.
3. If you suggest bringing in your own PC, you will be told NO.

These were the problems I faced two years ago when wishing to become computer literate. The second-hand Sanyo PC someone had daringly bought had been banned to a back office. I used to sneak up after hours, blow off the dust, and teach myself Wordstar. True, in mid-1988, the company installed a mainframe computer designed exclusively to generate invoices. There were a few terminals around, but no PCs at all. So I was stuck.

It was soon after that that I met Zita, my beloved Z88. I saw her at Olympia at the Personal Computer Show. So enchanted was I that I returned next day, decided I wanted this kind of companion, and



bought her. It was all rather sudden, for before I went, I thought a "Laptop" was a kind of domestic pet.

Given the prevailing attitudes, I was shy about taking Zita to work. From the saddlebag of my bike, I sneaked her into the drawer of my desk. I pretended to others that she was an electric typewriter and even dexterously covered her with papers when the boss came in.

I began with letters, progressed to production records and sales lists, sorted in various ways, and then mastered spreadsheets. I became more confident about her being seen [though she still sleeps in my drawer when not in use]. Of course I was soon doing 50% of my work on her. As well as the Sanyo printer, Zita drives the mainframe printer [a Genicom costing £3000], which is at least ten times her size!

Zita's greatest achievement came last February when she came to the rescue of the mainframe computer. Here I should explain that my Company sells 20 ranges of products. It's mainframe computer, installed at a cost of £40,000, has Dataflex, a stock-control system. Every year, I have to record stocks of 2000 printed items which are stored in two separate warehouses and have unit values ranging from .001 to £4.00. At last, I thought, I won't have to do all the calculations by hand! The mainframe will do it for me. Alas, it couldn't. The mainframe's so-called stock-control system didn't have the software to:

1. add two separate stock figures together.
2. multiply a stock figure by a unit price to get a stock value
3. add up a column of figures to produce a total

Calling in Zita. I transferred 2000 rows of raw data from the mainframe, turned the figures into spreadsheets, and did the calculations for every record which used to take me days - in minutes. Having done the hard work, Zita was able to transfer the information back to the mainframe.

In mid-1990, I am still the only person regularly using a computer outside sales and invoicing. I am currently building up a database of 14 "fields" growing at the rate of 80 records a month and using BASIC to produce 12 labels for every record.

I certainly enjoy being able to produce from tiny Zita what people think could only come from a BIG PC. And she actually makes work FUN, not to mention giving me the freedom to take my work and cycle to the river or home to my own garden. And even the boss now asks for figures from her!



# Queries, Hints & Tips

## **M.W. Hey (0703)**

Has anyone managed to get a UK ROM Z88 to print foreign accented characters, such as ù,ñ and Û? I have had several queries on the subject, and realise that it can be done using the PrinterEd, but have no desire to re-invent the wheel if someone has already beaten me to it! Please reply to my address in the Helpline section on page 5.

## **Keith Winsor(1968)**

Just a quick addition to Conrad Gempf's ideas on auto-deletion of :RAM.- files (EPROM August). Whilst his method will indeed work, the following one-liner

```
#F|ER:RAM.-/*~EN~E| [
```

set up as an execute alarm to operate every 12 hours or so, will erase all files in :RAM.- without prompting, and drop you back into the application you were previously using. By setting this alarm to run at a time you wouldn't ordinarily be using your Z88, you can avoid the slight possibility of it deleting a file you are actually using.

It's probably worth pointing out again to newcomers that performing a soft reset whilst files are held in :RAM.- can have disastrous results, hence the need to automatically erase them, and to avoid using :RAM.- whenever possible.

## **Carlos M.C. Tomas (1180)**

A small contribution answering the query from Sven A. Hansson (1632) in Z88 EPROM 4.2. It is a simple task to resume printing a PipeDream document starting from any line, or even finishing at a pre-determined line, or printing just a small piece of text between two known lines.

The Z88 manual is almost useless on this issue, to say the least. All we have to do is after pressing <>PO, change the default setting **No** at the prompt "Select rows to print" to **Yes**, by typing **Y**.

Then, if we want to start printing from line 25 for instance, we type **ROW>24**, or **ROW>=25**, and press [ENTER]; similarly if we want to have the document printed up to say line 82, we type **ROW<83**, or **ROW<=82**.

If we need to print only part of the document, say from line 30 to line 50, then type **ROW>29 &ROW<51**, or **ROW>=30 & ROW<=50**. Either upper or lower case can be used when typing "ROW", and the spaces before and after "&" can be omitted.

The Z88 takes a few seconds looking for the selected lines before starting to send data to the printer. When interrupting printing from the Z88 using the [ESC] key, we should switch the printer off and on again before restarting, since using the "On Line" switch can lead to unwanted data "left" in the printer buffer being printed.

Any headers or footers will be printed again, and the page number is always 1 regardless of the actual page from where we resume printing. When printing small documents we can save on paper by changing the default setting of "12" on the Printer Ed (page 2 - "End of Page") to "10", followed by <>FU. This works on any Epson compatible printer.

# Z88 Magic

Written by the people who bought you Z88 Training Days, described recently as 'Splendiferous' by a reader in the September/October 89's issue.

This 300 page illustrated book covers all the Z88 Applications. There are lots of examples and an abundance of TIPS. These point you in the right direction and show you the pitfalls.

Although full of facts and instructions, this book is never dry. Humour is sprinkled throughout like gold dust!

Z88 Magic - Published by Kuma Computers ISBN No: 07457 0137 X

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# Software Review - Eazy Money

by Ian Braby (0123)

This is a home finance manager written using zBASE and available as a run-time version - i.e. you don't need to own a copy of zBASE to use it but, equally, you can't access the zBASE program directly.

Roy asked me to review this program as I use the QL Home Finance program to keep my accounts in order - and I would say straight-away that unless you are the sort of person who looks for ways for your computer to help you, programs of this type don't really achieve any more than an account book and a pen!

That said, what does Eazy Money offer? What is it missing? What could be done better? What does it do better than some other, similar programs?

When you start, it helps to have read the manual! You are offered a menu which sets the default RAM which the program uses, default sub- directory (although it won't create "EAZY" if you choose it, you have to create it yourself - that's what I mean about reading the manual!) and whether you want pretty boxes around the menus. This latter option does look pretty but, if you've experienced Wordmongers' Boxchars before, you'll know that they do slow things down a little!

Once you've entered your requirements the program nips off to the Filer and sets everything up - which makes me wonder why it couldn't create the EAZY sub-directory if required. The program then makes an assumption... well it is only v1... but remember if you ASSUME you could make an ASS out of U and ME! Well, it assumes that you don't own zBASE because from the Filer it issues a [JW to return which, if you do already own zBASE starts that off and, if you have a ZBRUN file, starts that too! It would have been equally effective to have returned from the Filer with ESCape instead as that returns you to the calling program. However, issuing [JZW takes you from your zBASE back to Eazy Money and it will trundle off creating, in the first instance, the appropriate DBF's and NDX's.



It is at this point that you meet the Main Menu for the first time which offers you 5 Options:

- 1 - Transaction Menu
- 2 - Files Management
- 3 - Reports
- 4 - Period End Procedure
- 5 - Select Print Size

I shall deal with these in a seemingly random order! Starting with Number 2, which is where you need to start! The worst aspect of starting any finance program is setting up all the accounts and the like! Eazy Money works with four "account types" - BAN = bank accounts (and you should include Building Societies here, too, as they both receive and pay out funds!), CRC = credit card accounts, CSH = cash (you only get one of these) and NOM = nominal expense accounts, e.g. GROceries, PETrol, etc.

When you select "2" from the Main Menu you are offered the option of setting up "A"-accounts or "T"-transactions. Select "A" and enter the details of your bank account(s), credit cards and some general headings for expenditure. As you set up each you can ascribe a (unique) three letter code to each to make retrieval faster. For each BAN or CRC entry you can give details of the Title; e.g. Current A/C, Banker; e.g. Barclaywide Bank, the Account number and both the Opening and Current balances (these should be the same, initially!). Remember, too, that you OWE money to the credit card companies therefore their balances should be negative - something the manual fails to mention!

Each entry can be amended or deleted and you can cycle through them all with Next and Back. Should you decide to delete any they are, of course, only marked for deletion and you need to Clean them out before you eXit to the Main Menu.

Having done the hard part - i.e. setting the system up, it's time for the easy part - spending money!

To record your wild extravagances select "1" from the Main Menu. This now offers you a choice of 9 actions:

- 1 - Write a cheque (i.e. to anyone!)
- 2 - Use credit card

- 3 - Pay cash
- 4 - Withdraw cash (i.e. from one of your many bank accounts!)
- 5 - Pay a credit card bill (sooner or later you've got to settle up!)
- 6 - Receive a cheque
- 7 - Receive card refund
- 8 - Receive cash (now you did declare that income, didn't you?!)
- X - Exit to Main Menu.

All of the options take a pretty similar course and you allocate funds from your bank or pocket to any of your NOMinal expenditure accounts. The only difference is when you come to pay your credit card bill. This creates two entries, one a debit from the bank, the other a credit to the card company.

If writing a cheque, for example, you are asked to give the short code for the account from which you are spending money, to accept or alter the offered (today's) date, the amount, to whom you giving the money (short code, again) and a cheque number. You are then asked to confirm the entry. If you enter "N" you are given the opportunity to abandon the entry or re-enter it. This prompt will only accept a capital "R" for the re-entry procedure, otherwise it just abandons the entry (**BAD POINT!**). Once all is well you can enter another transaction or return to the Transaction Menu.

The Reports option (3 from the Main Menu) will allow you to print out three different reports - an expenditure summary, statement of account or a transaction listing by expenditure category. All of these require you to have a printer attached (**BAD POINT!**).

The first report is (at least) a two page one which starts with a list of all the NOMinal account headings you have created and the amount you have spent to date, a total receipts for this period and a total expenses and a period balance (receipts-expenses). The second page lists the opening balances for all the accounts (BAN, CRC & CSH) and then lists the current balances. The total for the opening accounts minus the period balance from page one should equal the total current balance! The second report asks, initially, for the account type you wish to view (BAN, CRC or CSH) and then for the particular account you require (again using short code). This report ideally requires you to use Option 5 - Change Print Size from normal print to condensed!



It gives a blow-by-blow listing of all the activities the account has been subjected to! The final report does much the same as the above but for a NOMinal account.

The only remaining entry on the Main Menu, now, is 4-Period End Procedure. This is what you do at the end of your financial year, or when the database becomes too large. It clears all the NOMinal balances and removes all the transactions, although it preserves all the account headings and balances ready for the next year. It is triple protected to prevent accidental erasure of the file!

Overall:

The program works very well at keeping your expenditure in check! It is not without fault, however, but this is only an early version and, knowing Tony Kaye as I do, I hope what I have to suggest will be accepted in the spirit in which it is given!

1. Since use is made of the internal clock in terms of dating transactions it seems a pity that no provision has been made for standing orders to be set up.

2. The great advantage to using Eazy Money to a desktop program is, obviously, the portability of the machine. This very portability means, of course, that you are usually without access to a printer (or, if not, you probably don't need to keep track of your expenditure!) and, therefore, it would be useful to view account balances, at least, on the screen from the reports menu rather than having to use the File Management section.

3. There is a flaw, I'm afraid, with the File Management section of the program. Should you delete a transaction this does not update the current balances of the account. The only way to completely rectify the situation, having deleted a transaction is to amend the account as well!

This apart, given the opportunity, I wouldn't mind keeping this! I'd prefer, I'll admit, just to have the programs and never mind the runtime version of zBASE having already spent money on this very flexible database program. I realise the problem is one of possible piracy but would it not be possible to have the programs saved as if on a ROM and only available from your own zBASE program. This may be naive, of course, but it would certainly be a lot less expensive than the present option.

Eazy Money is available from Wordmongers dealers for £69.



# TK COMPUTERWARE

## The Z88 SPECIALIST

STONE STREET, NORTH STANFORD, ASHFORD, KENT TN25 6DF  
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### HARDWARE:

£

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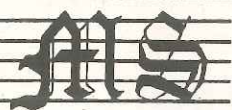
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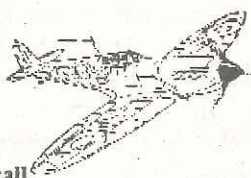
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# Book Review - "Using Your Z88"

by Michael W. Hey (0703)

When Roy asked me to review this book my first thought was "How nice! Yet another beginner-book!" After a few pages my initial cynicism melted away and I settled into a pleasant read. When I finished the book I was sad that I had not made its acquaintance two years ago when I was struggling to write my first programs on my new Z88.

"Using Your Z88" has been carefully written for the novice Z88 user. Patrick Hall has been careful only to use jargon and "computerese" after he has discussed what these words mean.

Quite often he will take time to explain a term thoroughly and at length rather than give a terse one-sentence explanation (the sort that defines an obscure technical word in terms of a couple of other obscure technical words). In fact sometimes he goes off on a happy little ramble for a couple of pages before finally getting to the point. This makes the book very interesting to read, even for a hardened Z88 "hack" like myself.

"Using Your Z88" is divided into ten chapters. The first is about using PipeDream as a word processor, (the book starts with a four page chat about what a word processor is, and how it differs from any form of writing aid possessed by earlier generations), the second is about PipeDream as a spreadsheet, and the third is about data management and using the Diary. The last seven chapters constitute a course in using BBC BASIC. There are 77 pages on the Diary and PipeDream, and 215 on programming in BASIC.

I bought my Z88 in June 1988, three months before this book was first published. My knowledge of BBC BASIC and its quirks was very limited, and I wish I had been given this book for my birthday because it would have saved me hours of time spent in fruitless experimentation.



The omissions from the book are somewhat puzzling. He explains PROCs but not FNs. He mentions nothing at all about star commands (like \*NAME), or VDU statements or using windows. You might think that these are not suitable for beginners learning BASIC (and you are entitled to your own opinions, even if they are wrong), but there is no hint of the existence of any other features, so that the beginner is unaware of facilities that he may wish to try out later. Patrick Hall was going to write a second book about the Z88, and he may have intended to go into more obscure features of BASIC, but this plan came to nought.

This book was published several months before the M-Tec guide to BASIC, and I get the impression that much of the Z88-specific information was not available to Patrick Hall when he was writing his book.

So, having complained about what he has missed, what exactly has Mr Hall included?

He has produced a thorough and interesting course on programming the Z88 with BBC BASIC. He starts with PRINT, RUN, INPUT and LIST, goes on to explain about using TAB to organise your display on the Z88's small screen, briefly discusses ASCII codes, reveals the difference between LOAD and CHAIN, unlocks the mystery of DIM statements and arrays,... and that is all in the first two of the seven "BASIC" chapters.

Patrick Hall does not assume that his readers have any knowledge about computer programming at all - not even that lines of a BASIC program require line numbers! (The Z88 User Guide does not mention this - just you imagine how frustrated a complete beginner could become without this crucial information. Ian Braby has something to say about making assumptions elsewhere in this issue.)

There is also a section about program design and flow-charting, and the use of PROCs and structured programming. These are very important topics, but they tend to get overlooked.

The chapters on programming are all illustrated with programs of varying length. Some are better than others (many are pretty trivial), but I firmly believe that the novice programmer will learn much more by entering programs and fiddling about with them to see how they work than by poring over pages and pages of complicated explanations.



What else can I write in praise of this book? Well, it has a VERY GOOD INDEX and AN EXTREMELY COMPREHENSIVE TABLE OF CONTENTS (certain other authors please note) so it is very easy to find your way around.

My conclusion: This is a very good book for anyone who wishes to learn about programming in BBC BASIC, but who is none the wiser after reading the Z88 User Guide. Once the novice programmer has got these seven chapters under his (or her) belt he/she is ready to purchase the M-TEC BASIC manual, which is much more comprehensive but much less comprehensible. The two books complement each other very well.

The coverage of PipeDream and the Diary is well written for the complete beginner, but there are several other books which devote much more attention to these. So you make your choice and you pay your money....

"Using Your Z88" by Patrick Hall, costs £9.95, and is published by Glentop Press Ltd., Unit 11, Stirling Industrial Centre, Stirling Way, Borehamwood, Herts., WD6 2BT. Telephone 081-953 9292.

## Z88-Locofont file on Amstrad PCW8512

by Roy Rudd (3854)

1. Copy MAIL232.COM from the original Systems Disc (where it is listed as a Hidden File) to GROUP 0 of B Drive of each of the Locofont System Discs (1 & 2).
2. Prepare an A Drive Disc with CP/M Plus on Side 1 and Locoscript 2 and Locofont system (1 or 2) on Side 2. Load CP/M Plus in A Drive in the normal way.
3. Change the A> Prompt to the B> Prompt.
4. Change the disc in A Drive to Side 2, but DO NOT press [f7] for Disc Change! (See Note 1 under 'POSSIBLE PITFALLS', Below.)
5. With the B> Prompt displayed on the screen and the new Disc inserted in B Drive :-  
(i) Type MAIL232. Press [RETURN] or [ENTER] and await completion of loading.

(ii) Press [f1]. Move the cursor down to 'Handwriting OFF' on the drop down menu. Press [+] to change it to 'ON' and then press [EXIT].

(iii) Press [f3] for 'RECEIVE' and type the name of the file to be transferred on the drop down menu. Press [ENTER]. The 8512 is now ready to receive any file from the Z88.

## On the Z88

1. First check on the FILER that the File which you wish to transfer has already been saved. Then call up PIPEDREAM and load this File.

2. Select 'Import/Export' from the Index ([IX]). The following display will be seen on the screen :-

B)atch receive, E)nd batch, R)eceive file or S)end file?

Press 'S' followed by [ENTER]. When asked, type the name of the file to be transferred and again press [ENTER]. The text of the file will be seen flashing along the bottom of the 8512 screen and the name of the file and line numbers will appear on the Z88 screen. When these cease to change, the file has been received by the 8512.

## On the PCW8512

1. When the transmission is complete press [ALT] and [STOP] together. This should cause the red light in B Drive to flash. If it does not, the file has not been transmitted. Check your procedure.

2. Pause until the red light in B Drive ceases to flash and then press [SHIFT], [EXTRA] and [EXIT] for a reset. Locoscript and Locofont will now be loaded (together with Locomail and Locospell if contained on these discs).

3. When the Disc Management display appears on the screen the newly transferred file will be shown in GROUP 0 of B Drive (the same Group in which MAIL232 is contained as a Hidden File). At this stage the transferred File is an ASCII File and cannot be edited. It must be converted to a Locoscript File. Follow the procedure set out in the next paragraph.

4. Create a new file in another group (e.g. GROUP 1). Press [f1] for 'Actions'. Move the Cursor down to 'Insert Text' on the drop down menu and press [ENTER]. An instruction at the top of the Disc Management display will tell you to indicate the file to be inserted. Mark the ASCII file in GROUP 0 and press [ENTER]



5. Mark the ASCII file in GROUP 0 and then press [ENTER] twice. The blank file will again be shown on the screen and the ASCII file will now be inserted into it in plain text. It will have Carriage Returns at the end of the lines, but these can be edited out in the normal way. There will also be ASCII jargon at beginning and end of the text, as well as before each heading. This should be erased.
6. Use [f1] and [f6] to set the desired font.

## Possible Pitfalls

1. At the end of the transmission of the file from the Z88 to the 8512 it is essential to press [ALT] and [STOP] before resetting. Otherwise, although the name of the new file will appear in GROUP 0 of B Drive on the Disc Management display, it will be shown as 'Ok'. It is taking up no space, because it has not been received. If you attempt to transfer it to another group, you will see a message showing 'Report unexpectedly interrupted'. Load CP/M and start again!
2. Failure to turn the Disc in A Drive before pressing [SHIFT] [EXTRA] and [EXIT] for resetting after completion of the transmission will result in CP/M being loaded again instead of Locoscript 2!!
3. If you have used the '#' sign in the Z88 file, it will be transmitted as 'BA3', which can easily be corrected on the 8512. However, this difficulty can be avoided by using the 'hash' sign instead of the '#' on the Z88. The '#' will then appear on the 8512.
4. If you wish to copy more than one file from the Z88 to the 8512, it is not necessary to go through the whole of the above procedure in relation to each. After pressing [ALT] and [STOP] at the end of each transmission simply press [f3] on the 8512, enter the name of the file to be received, and press [ENTER]. Then on the Z88, use the 'Import/Export' procedure again, entering the name of the new file to be transmitted.

NOTE : (i) Paragraph 3 of these 'POSSIBLE PITFALLS' will not make sense until appearing in plain text on the 8512. In its present form it is not intended to be meaningful on the Z88 Screen.

(ii) The word "Disc" has been used throughout in preference to "Disk", using the spelling adopted by Locomotive in their User Manual for Locoscript and on all the Locoscript displays on the VDU.



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# More zBASE Programming

by Tony Kaye (0158)

This zBASE program is a mini-menu routine for appending and editing data on a phone book file. 23,20,20,5

The file structure is COMPANY\$,23. PHONE\$,20. CONTACT\$,20. KEYFIELD\$, 5

The keyfield is used for the index and contains the first 5 characters of the company field, if it is non-blank otherwise it holds the first five characters of the name field. Even on a file of 1000 records the index file will be less than approx. 6K and therefore resides totally in a buffer and therefore allows access using FIND in less than about 2 seconds.

In case of query, drop a line to me at the Wordmongers address. I'll arrange a fully documented copy of the program for you.

\* ED NEW VERSION WITH MENU

```

cls
at 2,10 say ''Company ....''
at 3,10 say ''Phone .....''
at 4,10 say ''Contact ....''
at 5,10 say ''Keyfield ...''

let change = 0
let mkey$=''
let choice$='E'
at 7, 5 say ''(A)dd, (E)dit, (F)ind, (D)el/recall,
(N)ext, (B)ack, e(X)it.''
DO WHIL choice$<>'X'
  at 1,35 say ''
  at 7,68 get choice$
  AT 4,62 SAY '' '' let choice$ = upper(choice$)
  if uppe(choice$)='A'
    append blank
    at 1,35 say ''APPENDING''
  endif
  if upper(choice$)='E'
    AT 1,35 SAY ''EDITING ''
  endif

```



```

if upper(choice$)='''
  at 1,35 say ''FINDING ''
  at 2,60 say ''Find what?''
  let mfind$='''
  at 4,62 get mfind$
  AT 1,35 SAY ''Searching''
  let mfind$=trim(mfind$)
  find mfind$
  at 2,60 say ''
  IF RECNO()=0
  AT 2,60 SAY '' NO FIND ''
  AT 5,59 say ''Press a key''
  WAIT
  AT 2,60 SAY ''
  AT 4,62 SAY ''
  AT 5,59 SAY ''
  go top

```

ENDI

ENDIF

```

if upper(choice$)='''N''
  at 1,35 say ''SKIPPING ''
  SKIP
  if eof()
    go top
  endif
endif nexting
if upper(choice$)='''B''
  at 1,35 say ''SKIP BACK''
  SKIP -1
  if recno() = 0
    go BOTT
  endif
endif backing
if upper(choice$)='''D''
  AT 1,35 SAY ''DELETING ''
  DELETE RECORD
endif DELETING
at 2,23 say 1:COMP$
at 3,23 say 1:PHONE$
at 4,23 say 1:NAME$
at 5,23 say 1:KEYFIELD$
IF DELETED()

```

```

AT 5,40 SAY '*** DELETED ***'
ELSE
  AT 5,40 SAY ''
ENDIF
if where(choice$, 'AE') <> 0
  let mkey$ = 1:keyfield$
  at 2,23 GET 1:COMP$
  at 3,23 get 1:PHONE$
  at 4,23 get 1:NAME$
  IF TRIM(1:COMP$) = ''
    LET mkey$ = SUBSTR(1:NAME$,1,5)
  ELSE
    LET mkey$ = SUBSTR(1:COMP$,1,5)
  ENDI
  at 5,23 get mkey$
  if UPE(mkey$) <> UPPE(1:keyfield$)
    let 1:keyfield$ = mkey$
  endi
endif
endd
rele finder$, choice$, more$, fkey$,
looking$, MFIND$, CHANGE, MKEY$
CLS
retu

```

## Library News

Some good news this month, together with a few new programs. Firstly, here's the news.....

1. The uploading of the programs to Kybernesis is complete.
2. Spectrum users: having disinterred my machine and investigated Z110 I feel able to offer, **on mdv only**, Library programs ready to upload to your Z88.
3. Archimedes owners: you now have your own sub-librarian! He is:

**Mr. Steve Drain**  
**14 Pauls Mead**  
**PORTLAND**  
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**DT5 1JZ**

..and he is prepared to provide you programs on Arc-format disks but no more! Submissions still come to me as do requests for the Library Lists and EPROM erasures.

I was also hoping to be able to tell you all this month that we had an Amiga sub-librarian ready to serve but The Music Suite have singularly failed to provide an updated version of their software to him for a definitive "head-to-head" with Sector Software's program, so we'll have to wait to see which is chosen for the Library before we start!

On the same note - I'm still waiting to hear from The Music Suite, too! And would Alan Fleming please let me have his current address?!

## **New Programs**

- Z100 Tinus van de Wouw has continued to update this program despite the fact that only 5 people have, so far, registered with him!
- Z121 SPEEDER (3.5K) from Mr.S.Sayer (1348). Knowing the distance between two fixed points this program calculates a vehicle's speed and then plots it!

A=documentation  
B=SPEEDER  
C=GRAPHIT

### **Z122-3 Two programs by Keith Beddoe (3869)**

- Z122 PROGMAIL (3.5K) will convert Z88 programs into mailbox format for uploading to Prestel and reconstitute them after downloading.

A=documentation  
B=PROGMAIL  
C=SOFTMAIL

- Z123 ZCHECK (1.5K) - for machine-coders - this will calculate a checksum for each program in memory so that you can check for any corruption after experimentation.



## Small Ads & Swapshop

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A bumper crop of bargains this time:

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128K RAM - £35; 32K RAM - £15; 32K EPROM - £15; "BBC BASIC REF. MANUAL (M-TEC) - £8, "Z88 REAL POWER COMPUTING" - £5; "Z88 COMPUTING" - £5. ALL PRICES INCLUDE P&P. PHONE ANDREW MORRISON ON 071 720 7076 (EVES)

**\*\*WANTED\*\***

Z88 SOFTWARE DEVELOPERS NOTES. ANY CONDITION AS LONG AS THEY'RE READABLE. PHONE GRAHAM ON 0329 661677 ANYTIME.

**\*\*WANTED\*\***

WORKING 32K EPROM. PHONE IAN ON 047081 385.

**NEXT ISSUE OUT LATE OCTOBER!**

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**ALL TRADEMARKS ACKNOWLEDGED**

**Z88 EPROM is printed on recycled paper.**

**Don't forget - send for your Workshop Day tickets TODAY!! Just £3 each from the Club Address on page 2.**



# HiTEK Marketing

72 Longmoor Lane, Breaston, Derby. DE7 3BB

**\*\*STAR BUY OF THE MONTH\*\*** For all orders received by 31st October 1990

Personal 80 Mobile Printer - £175.00  
Personal 80 Mains Printer - £110.00

Serial interface for the Z88. Includes Z88 adapter and 25 pin standard lead. See review in March '90 Z88 EPROM or send SAE.

## Books

Z88 PipeDream -  
A Dabhand Guide £14.95  
Z88 Magic £14.95

## PC Link II - £34.00

Please state whether 9 pin to 25 pin cable or 9 pin to 9 pin cable is needed

## Wordmongers Software

zBASE £69.00  
ZTerm £50.00  
ZTape £50.00  
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## Kodak Diconix 150 Plus Printer

Top quality inkjet printer, complete with mains adapter, rechargeable batteries and carrying case. - £390.00  
Extra Inkjet Cartridges £16, 3 for £39.

## \*\* SUMMER SPECIAL\*\*

Z88 All in One Pack with FREE EPROM Eraser and 32K EPROM - £280.00

## Ni-Cd Battery Holder

To run your Z88 on low-cost rechargeable batteries.

Battery Holder for 5 cells - plugs into your Z88 - just £4.95  
5 Quality Rechargeable Batteries - £6.95. Charger - £7.95  
SAVE £1.90 on complete kit of Holder+Batteries+Charger - ONLY £17.95

Z88 Computer	£229.95	Parallel Cable	£29.00
Mains Adapter	£10.00	Serial Cable	£10.00
32k RAM Pack	£20.00	Topper Cover	£7.75
128k RAM Pack	£50.00	Carrying Case	£10.00
512K RAM Pack	£200.00	BBC Link	£23.00
32k EPROM Pack	£20.00	Atari ST link	£19.95
128k EPROM Pack	£50.00	Lead for Atari	£12.95
EPROM Eraser	£40.00	Spellmaster	£56.00

Z88 Users' Club EPROM vouchers given with all the above except Star Buy of the Month. One voucher worth one issue of "Z88 EPROM" for each complete £50 spent per order. Vouchers are valid for one year and can be used to join the Club or to renew membership.

All prices inclusive for UK despatch only. Cash with Order.

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